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Before the  
**Federal Communications Commission**  
Washington, D.C. 20054

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In the Matter of

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AMENDMENT OF PART 97 OF THE  
COMMISSION'S RULES GOVERNING

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THE AMATEUR RADIO SERVICE TO  
RESCIND 97.221 Subpart C

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To: The Chief, Wireless Telecommunications Bureau  
VIA OFFICE OF THE SECRETARY

**PETITION FOR RULE MAKING**

Howard Teller, Amateur Radio Operator, KH6TY, hereby respectfully requests that the Commission issue at an early date a Notice of Proposed Rule Making, rescinding Part 97.221 Subpart C, of the rules governing the Amateur Radio Service.

**Background**

On July 1, 1995, the Commission, upon recommendation of the American Radio Relay League (ARRL), enacted Part 97.221 of the regulations, permitting fully automatic operation of digital stations on the high frequency (HF) bands for the first time.

This ruling permitted an automatically controlled digital station (robot), scanning a range of frequencies, to

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automatically detect and connect with a manually controlled remote station that is transmitting the robot's callsign, for the purpose of transferring email, weather reports, position reports, and bulletins, to and from the Internet. At that time, there was great concern expressed by the Commissioners about potentially increased interference (PR Docket No. 94-59), because automatic stations have no control operator present to listen for activity on the frequency before transmitting. Therefore, the Commissioners required the operator of the station remotely connected to the automatic station to prevent the automatic station from causing interference. It was not specified how this was to be accomplished, but the Commissioners stated, "We also are confident in the ability of the amateur service community to respond, as it has in the past, to the challenge of minimizing interference with novel technical and operational approaches to the use of shared frequency bands".

The Commissioners also allocated subbands for the operation of two automatic stations to talk with each other, where there are no listening control operators present at all. Operation outside of the subbands was also permitted as long as the automatic station was under "interrogation" by a station under manual control of an operator at the control point, whose responsibility was to prevent interference to others, and this was established by Subpart C of Part

97.221.

The ARRL (American Radio Relay League), in their comments to the FCC filed October 3, 1994, PR Docket 94-59, supporting adoption of Part 97.221, argued that "should the enactment of the rules as proposed lead to a significantly increased enforcement burden for the Commission, automatic control could in the future be curtailed". The ARRL also further commented that, "Nor should anyone be permitted to believe that the authorization of automatic control in any configuration confers on the control operator a sense of entitlement, ownership, or proprietary interest in the use of a given frequency merely by past operation of an automatically controlled digital station on a given frequency, or the right to usurp that frequency for long periods of time, to the detriment of other amateurs."

**Negative impact of the enactment of Subpart C of Part 97.221**

Interference to traditional person-to-person amateur radio communications by unattended automatically controlled digital stations is at an all-time high.

The unattended automatically controlled digital stations publish the only frequencies where they will respond to a call, and they then respond automatically to any station calling them on one of those frequencies, regardless of any other activity, local to the robot station, already using

the frequency, giving rise to the inescapable presumption that the automatically controlled digital station "owns", or has a proprietary interest in, the use of the published frequency at will.

This should be distinguished from a published "Net" frequency, which is a single frequency used by a multitude of stations for the purpose of exchanging information.

**No novel approaches to minimizing interference have been developed**

Instead of "minimizing interference with novel technical and operational approaches to the use of shared frequency bands", as anticipated by the Commissioners in 1995, the robot stations have, instead, adopted a protocol in which both the robot station and the remote station continuously retransmit data until they successfully overpower any other station using the frequency, or automatically shift to an alternate published frequency and again continuously retransmit data until they successfully overpower any other station using the alternate frequency, making it impossible for any station already using the frequency to continue communicating. Instead of sharing the frequency with others, the robot and remote stations simply, and consistently, dominate a frequency at will with their chosen protocol. The robot station is inherently incapable of receiving, or

acting upon, notification that the frequency is already in use, and the behavior of the remote stations consistently demonstrate total indifference to the frequency already being in use. As a result, the behavior of stations, presumably under manual control, is indistinguishable from a station under fully automatic control.

Instead of electing to cluster together in a contiguous portion of each amateur band, where others can avoid them, the robot stations have spread their published scan frequencies over the entire allowed region of each high frequency amateur band, resulting in unpredictable and random interference to all other stations attempting to communicate anywhere near the frequencies used by the robot stations, and making it impossible for others to know where they can operate without constant interference from the robot stations or their remote clients.

#### **Proposed rule change**

Rescind Part 97.221, Subpart C, as the current 97.221, Subpart B, subbands are sufficient to reasonably accommodate the activities of the automatically controlled digital stations and their remote clients, which collectively currently represent significantly less than one percent of all FCC licensed radio amateurs.

### **Effects of proposed rule change**

The current historically high level of interference to all others by automatically controlled digital stations, and by their remote clients, whether under control of an operator at the control point, or under automatic control by software, will be eliminated.

The ability of the networks of automatically controlled digital stations to function will not be impaired, and all other users of the spectrum will know where the automatically controlled digital stations will be operating so they can easily avoid them.

The reason that the ability of the networks of automatically controlled digital stations to function will not be impaired is that the automatically controlled digital stations are only used for email "messaging" in delayed time (a function similar to a telephone answering machine), and not for normal real time communications between persons. The time delay between the leaving of a message and its ultimate retrieval is always many minutes or even hours. Therefore, a single frequency can be shared by two or more automatically controlled digital stations by just waiting a few minutes for a frequency to become clear, greatly reducing the amount of spectrum needed by the automatically controlled digital stations, and allowing them to function effectively within the current Part 97.221 subbands, without any noticeable

delay in message receipt.

Respectfully,

A handwritten signature in cursive script that reads "Howard Teller". The signature is written in dark ink and is positioned above the printed name.

Howard Teller

Amateur Radio Operator, KH6TY

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December 26, 2005